LAURA JONES BOTTOMLEY (2007)
North Carolina State University

Dr. Laura Jones Bottomley has been a mentor and supporter of students from underrepresented groups at North Carolina State University since 1997 and for six years before that at Duke University. She holds a Ph.D. in Electrical Engineering and is Director of K-12 Engineering Outreach Programs and the University's Women in Engineering Program. Dr. Bottomley has created a mentoring pipeline that can serve as a national model for K-12 outreach and support of underrepresented students at all levels. She initiated science curriculum reforms for all of the elementary schools in Wake County, North Carolina and she conceived of and leads the statewide "Engineering on the Road Program." Through a tiered-mentoring process, and with the help of undergraduate engineering students, she provides hands-on engineering activities to 25,000 students annually.

LESIA L. CRUMPTON-YOUNG (2007)
University of Central Florida

Dr. Lesia Crumpton-Young is an engineering scholar who excels at research, teaching, and service. She is Professor of Industrial Engineering and Management Systems at the University of Central Florida as well as an author and recipient of multiple awards in Educational Leadership. She has comprehensively and effectively integrated research experience with mentoring to increase the number of women and minorities in engineering. Dr. Crumpton-Young was the first African American woman to graduate with a Ph.D. from the College of Engineering at Texas A&M University as well as the first African American woman to be Department Chair of an Industrial Engineering Department. Throughout her career she has engaged in mentoring activities in order to increase student awareness and engagement in the field of engineering, and mentored over 280 students and 35 faculty members nationally. She has particularly focused on introducing engineering to underrepresented groups in the community through an array of outreach activities targeted at minority and disadvantaged students.

PATRICIA A. DELEON (2007)
University of Delaware

Dr. Patricia DeLeon is Professor of Biological Sciences at the University of Delaware and member of the University Board of Trustees. A dedicated educator, she has mentored many students from high school through graduate levels and postdoctoral trainees and faculty members. Her efforts have served a generation and more of students since 1982, and more than half of the 100 undergraduate students she has mentored have gone on to obtain or pursue Ph.D.'s, M.D.'s, or other graduate degrees. The success of her undergraduate mentoring program is paralleled by that at the graduate and post-doctoral levels. Dr. DeLeon has extended her mentoring program by creating summer programs that attract students from two neighboring minority access institutions.

JERZY R. LESZCZYNSKI (2007)
Jackson State University

Dr. Jerzy Leszczynski recognized early in his career that successful mentoring is integral to an effective research program. He led the expansion of the Computational Chemistry Department at Jackson State University through the creation of a Ph.D. program that included formal and informal mentoring programs. The new programming helped increase the number of African American and female students trained in computational chemistry methods. The program has grown to enroll approximately 50 students, more than 50 percent of whom are African American. Seven students have already defended their Ph.D. theses. Three Ph.D. students from Dr. Leszczynski's group were selected to participate in the annual Lindau Nobel Laureate meetings in Germany.

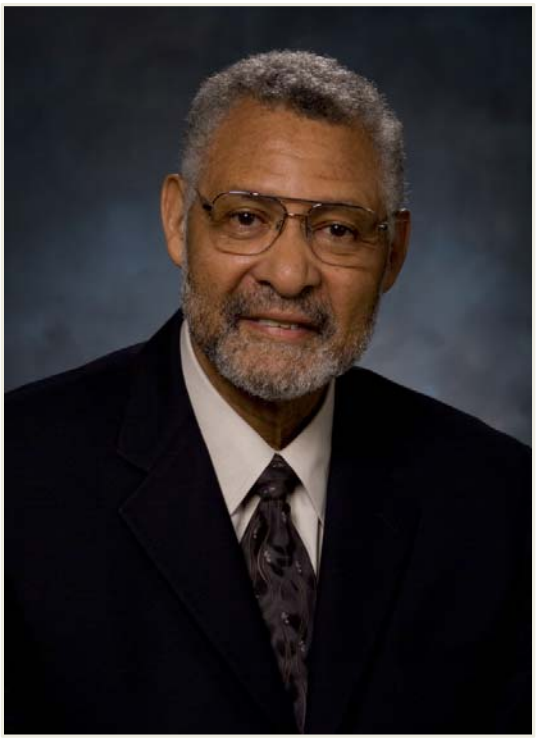
MARY ANNE NELSON (2007)
University of New Mexico

Dr. Mary Anne Nelson has demonstrated a commitment to linking nationally competitive research with excellence in teaching and mentoring at all levels. She has provided years of service to the fungal genomics community and is Director of the Neurospora Genome Project. She has had a major impact on the careers of many underrepresented students in the sciences through her direct mentoring and work with minority undergraduate research training programs such as the National Science Foundation's Research Improvements in Minority Institutions Program and the National Institutes of Health's Minority Access to Research Careers Program. Since 1992, Dr. Nelson has worked with 47 undergraduate and Ph.D. students in her laboratory. Of the 31 papers that Dr. Nelson has had published in peer-reviewed journals, nine are co-authored with underrepresented students from her group.

STEVEN B. OPPENHEIMER (2007)
California State University, Northridge

Dr. Steven Oppenheimer brings 35 years of commitment to student research and mentoring. Putting into practice his belief that laboratory research experiences should be available to all interested students, he has developed an open door model that encourages students of all economic strata and ethnic groups to participate in research. He has been known to take as many as 40 students per semester in his lab. His dedication to mentoring undergraduates has resulted in 100 undergraduate students having two-year experiences in his laboratory. Of these, 66 were female students and 33 were minorities. His record has proven true his often-stated expectation that any interested student can succeed in scientific research and can go far into the professional career ranks of science, including the Ph.D. and M.D.

KENNEDY REED (2007)
Lawrence Livermore National Laboratory

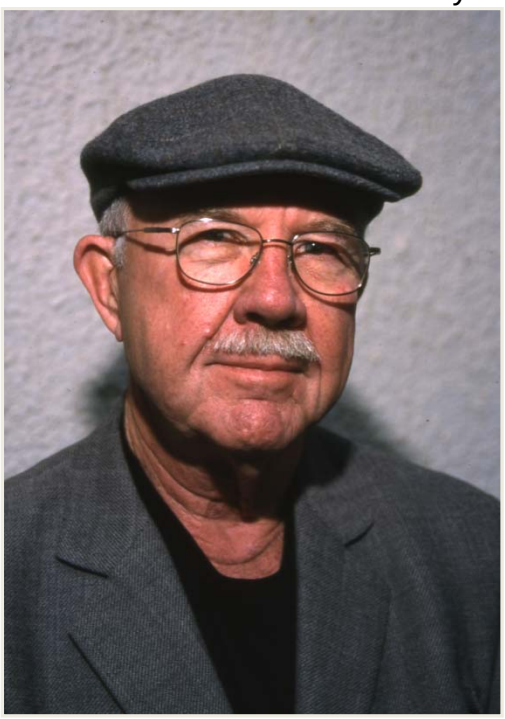


Dr. Kennedy Reed has led a distinguished career as a physicist at the Lawrence Livermore National Laboratory (LLNL) since 1979. He has created an extensive portfolio of work broadening the participation of women and minorities in disciplines relating to science, technology, engineering, and mathematics. He has established a program with national impact that brings together LLNL scientists, faculty from Historically Black Colleges and Universities and other minority-serving institutions. This unique program has produced more than thirty scientific publications co-authored by LLNL scientists and minority faculty and students. All told, Dr. Reed has helped more than 100 minority students receive their doctorate and, working through the National Physical Science Consortium Fellows program, he has helped more than 300 students receive graduate fellowships.

KENNETH SHANE SAJWAN (2007)
Savannah State University

Dr. Kenneth Shane Sajwan has established a visionary mentoring program at Savannah State University, an Historically Black University with over 3,000 students. Dr. Sajwan's work is focused on increasing the quality of students and their commitment to earning undergraduate and graduate degrees in science, technology, engineering or mathematics. Over a 15 year period, Dr. Sajwan has mentored and advised over 58 students, all of whom have graduated with B.S. degrees in Environmental Science. Thirty of these have worked with him on funded research; 16 have gone on to pursue Master's and Ph.D. degrees; and one student has completed a post-doctoral fellowship at Harvard University Medical School. Dr. Sajwan has also authored or co-authored 113 publications with his students.

FRANK T. BAYLISS (2008)
San Francisco State University



Professor Frank Bayliss has provided more than 25 years of teaching service at San Francisco State University (SFSU). He established the campus' first genetic engineering research laboratory and SFSU's Student Enrichment Opportunities (SEO) office in 1992. The SEO office enhances the education and research experiences of undergraduate and graduate biology and chemistry students by establishing an interlocking system of talent development and support that spans the freshman-to-Ph.D. student continuum. Sixty-four of Professor Bayliss' minority students have won admission to Ph.D. programs at top research universities; 19 former students have completed Ph.D. degrees; an additional 20 completed their Ph.D. in 2008; and 102 are on track to earn their Ph.D. within the next five years. This exceptionally high level of success is particularly noteworthy because, for many decades, few SFSU minority students applied to or entered Ph.D. programs.

GOLDIE S. BYRD (2008)
North Carolina A&T State University

Dr. Goldie Byrd serves as Professor and Chair of North Carolina A&T State University's Department of Biology and member of the North Carolina Science Board. Over her career, Dr. Byrd has been instrumental in developing innovative curricula, conducting research, and mentoring research students on the undergraduate, graduate, and postdoctoral levels. She has a stellar track record of conceptualizing, developing, and winning support for mentoring activities at the high school, undergraduate, Masters, and Postdoctoral levels. Dr. Byrd's efforts have been especially far-reaching as some of the minority and non-minority teachers and college faculty members she has mentored have themselves gone on to mentor minority students in the sciences. Her outstanding track record of advancing minority students toward Ph.D. programs and subsequently into careers in the biological and biomedical sciences and healthcare is one reason why, in 2001, she was honored as a recipient of the North Carolina Board of Governors award for Teaching Excellence.

SUZZETTE F. CHOPIN (2008)
Texas A&M University, Corpus Christi

Dr. Suzzette Chopin is Professor of Biomedical Sciences, Director of the Office of Special Programs and the Office of Research Development, and a Regents Professor at Texas A&M University. Dr. Chopin's leadership was instrumental in transitioning university emphasis toward faculty research and changing the culture to one that embraces and promotes undergraduate research, mentoring, and increasing diversity in science. Dr. Chopin has mentored 45 undergraduates in research, 69 percent of whom were minority students and 89 percent of whom have matriculated into graduate or professional schools or are currently employed in science careers. Her leadership in the university's Louis Stokes Alliance for Minority Participation and Research Experience for Undergraduates Programs has helped result in a majority of student participants in those programs going on to graduate or professional school or joining the scientific workforce.

NANCY L. ELWESS (2008)
State University of New York at Plattsburgh

Dr. Nancy Elwess, a Professor in the Department of Biological Sciences at the State University of New York (SUNY) at Plattsburgh, has dedicated 13 years to mentoring. During her tenure, Dr. Elwess has developed a reputation for her dedication to helping undergraduate students conduct advanced DNA research. Nearly 100 of her students have given presentations at national and international conferences, and many have brought home top honors. Many of Dr. Elwess' students have also gone on to pursue higher degrees in science, technology, engineering or mathematics after being accepted into such schools as Yale University and the University of Oregon. Dr. Elwess' program involves organizing her students to return to the high schools from which they graduated to discuss the benefits of attending college and the thrill of working in science. Her efforts have significantly increased the number of applications from local schools to SUNY Plattsburgh and changed the student demographics of the Department of Biological Sciences.

BENJAMIN C. FLORES (2008)
University of Texas at El Paso

Dr. Benjamin Flores is Professor of Electrical and Computer Engineering at the University of Texas at El Paso. He has held several administrative positions including Associate Dean for Graduate Studies for the College of Engineering, Chair of the Electrical and Computer Engineering Department, and Interim Chair of the Computer Science Department. Over the course of 18 years of service, he has sustained mentoring and guidance efforts that have significantly enhanced the participation of underrepresented groups in science, technology, engineering and mathematics (STEM) disciplines. Currently he is Director of the University of Texas System Louis Stokes Alliance for Minority Participation and Director of the STEM Talent Expansion Program. Dr. Flores has been a dedicated counselor and guide for the local student chapters of the Institute of Electrical and Computer Engineers, the Electrical Engineering Honor Society, the Engineering Honor Society, the National Society of Black Engineers, the American Society for Engineering Education and the Mexican Student Association. Dr. Flores is also responsible for implementing the Women in Science and Engineering (WiSE) program, which has provided support to 250 undergraduate female students. Through WiSE, Dr. Flores developed activities that reached out and promoted STEM careers to more than 300 middle-school girls and their parents. In addition, Dr. Flores directed the first centralized undergraduate STEM research program on campus, which supported 303 undergraduate students between 1996 and 2003.

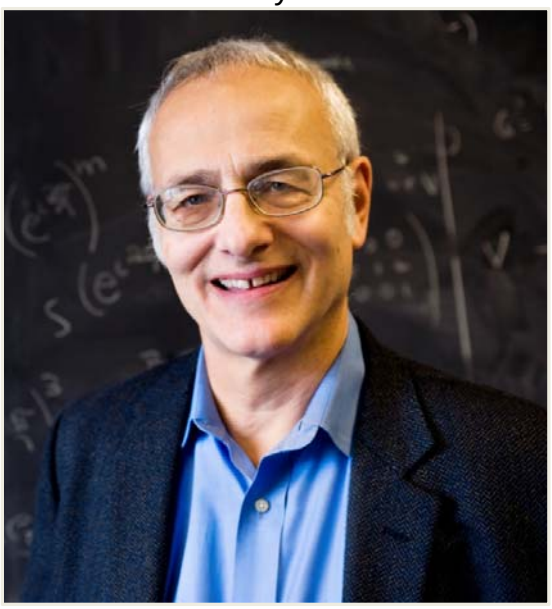
ASHANTI JOHNSON (2008)
Institute for Broadening Participation

Dr. Ashanti Johnson is Executive Director of the Institute for Broadening Participation and Assistant Professor of Chemical Oceanography at the College of Marine Science in St. Petersburg, Florida. She authored a unique program that creates a community of scientists to assist students' professional development with support from peers, senior mentors, and professional organizations. She founded Minorities Striving and Pursuing Higher Degrees of Success in Earth System Science (MS PHD'S®), an organization that provides professional development experiences to facilitate the advancement of minorities committed to achieving outstanding Earth system science careers. Dr. Johnson has served as director of many programs important to mentoring at all educational levels, including the Minorities Striving and Pursuing Higher Degrees of Success in Earth System Science Initiative, the University of South Florida College of Marine Science OCEANS Graduate STEM Fellows in K-12 Education Fellowship Program, and Georgia Tech's FACES program, as well as serving as a member of the U.S. National Science Foundation Advisory Committee on Environmental Research and Education.

SUSAN M. KAUZLARICH (2008)
University of California, Davis

Dr. Susan Kauzlarich has been Professor of Chemistry at the University of California, Davis, since 1987 and was a recipient, in 1997, of the Maria Goeppert Mayer Distinguished Scholar Award from Argonne National Laboratory. Dr. Kauzlarich has built and continues to develop a pipeline that effectively steers women and underrepresented students into chemistry classes and careers from high school through graduate study and beyond. She has received two awards for her mentoring efforts from the University of California, Davis: the Outstanding Mentor Award from the Consortium for Women and Research (2002) and the Distinguished Graduate Mentoring Award (2005). Dr. Kauzlarich’s one-on-one approach to mentoring has been highly successful; among her graduates are 25 Ph.D. and four Master’s degree students as well as 13 postdoctoral fellows. Dr. Kauzlarich's award-winning students have been extremely well prepared as they have gone on to enter the science, technology, engineering and mathematics workforce through academia and industry.

PHILIP KUTZKO (2008)
University of Iowa



Dr. Philip Kutzko has been a leader in the University of Iowa's Department of Mathematics, as he has throughout the state of Iowa and nationally, in the effort to increase the participation of groups that are underrepresented in the fields of science, technology, engineering, and mathematics. He was among the initial group to conceive and implement the Department's ongoing project to build an inclusive and diverse graduate program. In 2000, Dr. Kutzko wrote the proposal that resulted in the Department of Mathematics becoming designated a Sloan Minority Scholarship Department. This designation resulted in 14 of the Department's minority students—including all of the Department's recent Ph.D.s—receiving Sloan Scholarships as they passed their Comprehensive Exams. Dr. Kutzko founded and co-directs the National Alliance for Doctoral Studies in the Mathematical Sciences, a National Science Foundation-sponsored partnership of math sciences departments at the Iowa Regents Universities and mathematics departments at approximately 20 minority-serving institutions. He serves as the Iowa Regents mentor at Florida A&M University, where he has mentored an additional 21 students.

CATO T. LAURENCIN (2008)
University of Connecticut School of Medicine

Dr. Cato Laurencin is Dean of the University of Connecticut School of Medicine as well as a professor and surgeon there, and Vice President for Health Affairs at the University of Connecticut. During Dr. Laurencin's previous tenure at the University of Virginia, he served as Lillian T. Pratt Distinguished Professor, Chairman of Orthopedic Surgery, Professor of Biomedical Engineering, and Professor of Chemical Engineering. During the past 18 years, more than 85 underrepresented minority students at the undergraduate, graduate, and post-graduate levels have undertaken research projects in his laboratory, with more than 20 students completing graduate or post-graduate degrees, honors research theses, and award presentations. An integral part of Dr. Laurencin's mentoring activities has been the inclusion of underrepresented minority students at the undergraduate and graduate levels as well as students, post-docs, and faculty across a wide spectrum of disciplines.

STACY PHELPS (2008)
Mid-Central Educational Cooperative

Mr. Stacy Phelps has served as a mentor to underrepresented students since 1992. His mentoring activities have focused on increasing the number of Native Americans that succeed in science, technology, engineering, and mathematics (STEM) disciplines and careers—an important goal since this minority group is among the most underrepresented in these fields. During the course of his career Mr. Phelps has managed and secured more than $32 million in grants focused on college readiness and STEM education for Native American students. In 1992, as an undergraduate student, he initiated a program that has now evolved into SD GEAR UP, a program to get middle- and high-school students and their parents ready for college, which targets 1,100 students per year in grades 6 through 12 for college awareness and preparation. In 2003, the South Dakota School of Mines and Technology recognized Mr. Phelps as its “Outstanding Recent Graduate,” making him the youngest person to receive this recognition. In addition to his work with SD GEAR UP, which now serves 24 middle schools and 14 high schools across South Dakota, Mr. Phelps has been the driving force behind a very successful summer residential pre-college enrichment program and the expansion of STEM infrastructure at Oglala Lakota College in Kyle, S.D.

RICHARD N. ZARE (2008)
Stanford University

Dr. Richard Zare is the Marguerite Blake Wilbur Professor in Natural Science at Stanford University. He is Chair of the Department of Chemistry at Stanford University and a Howard Hughes Medical Institute Professor. Dr. Zare's mentoring interests are directed at improving opportunities for all students, but he is passionate about gender and ethnic equity in the fields of science, technology, engineering and mathematics. He has developed a stellar 40-year career as a scientist, educator, and leader in public science. Some of his distinguished recognitions include receiving the National Medal of Science, the National Academy of Sciences Award in Chemistry, and serving as a member of the National Science Board. He has had a national impact as a teacher and author and his interests and career success place him in the position to serve as a role model for effective mentoring of women and minorities in science. He has mentored 49 post-docs and graduate students who are women or minorities. Of these, 17 went on to become faculty members in chemistry or physics—a substantial contribution of minority educators from a tier-one research institution and one that stands to have a profound effect on the national higher education community.

LEADERSHIP ALLIANCE (2007)
Providence, Rhode Island
Partnership for Minority Science Education Program

The Leadership Alliance is an organization of 33 institutional members that created the Partnership for Minority Science Education (PMSE). PMSE links the resources of the Leadership Alliance's research institutions to the talent pools of underrepresented students from its minority serving institutional partners nationally. Specific mentoring activities include: the Summer Research Early Identification Program (SR-EIP), an eight to ten week research experience for undergraduates that links students with research mentors; and the Leadership Alliance National Symposium (LANS): a national networking site for all members of the Leadership Alliance. Over a four year period, 768 underrepresented undergraduate students participated in cutting-edge summer research through the PMSE and SR-EIP. On average 165 students complete research projects each summer. Sixty-six percent of the students are women, 52 percent are African-American, 35 percent are Hispanic, and 13 percent are Native American. More than half of SR-EIP students experience research for the first time through the program.
Represented by Dr. Valerie Petit Wilson

MARIA MITCHELL ASSOCIATION (2008)
Nantucket, Massachusetts

The Maria Mitchell Association (MMA) is dedicated to furthering science education, encouraging women in science, and serving as a science resource for Nantucket, MA. MMA honors America's first professional woman astronomer who believed that students learned best through conducting real research projects. The Association recently celebrated its centennial (1908-2008) and the fiftieth anniversary of its outstanding undergraduate mentoring program. The career paths of MMA astronomy alumni/ae show remarkable and ever improving results. In particular, the percentage of MMA astronomy alumni/ae attaining the Ph.D. level increased from approximately 20 percent in the first two decades of the program to about 60 percent in the last decade (approximately equal for male and female astronomy interns). This is a remarkable and promising achievement, given the relatively small numbers of Ph.D.-level women researchers and professors in American astronomy and physics.
Represented by Dr. Vladimir Strelnitski

PROJECT EXPLORATION (2008)
Chicago, Illinois

A nonprofit science education organization, Project Exploration's mission is to make science accessible to the public—especially minority youth and girls—through personalized experiences with science and scientists. Project Exploration targets students who may not already be academically successful, but are curious, open-minded, and passionate. The science programs offered by Project Exploration are starting points for long-term programming. After initially piquing students' interest in science, Project Exploration focuses on building their capacity to continue that interest. The organization has had significant impact on supporting students through high school and toward further science, technology, engineering and mathematics (STEM) education: 96 percent of Project Exploration students have graduated high school; 61 percent have gone on to a four year college; and 34 percent of all students (43 percent of women) are majoring in science. Project Exploration recruits students from groups that are historically underrepresented in science professions, particularly those from low-income backgrounds: 81 percent of program participants are female, 73 percent are African American, and 25 percent are Latino. By focusing on, and showing success with these populations, Project Exploration is addressing critical issues facing STEM education today: inequality of opportunity, lack of diversity, and workforce development.
Represented by Dr. Gabrielle E. Lyon